STATE HISTORICAL SOCIETY OF IOWA
IOWA DEPARTMENT OF CULTURAL AFFAIRS
The Annals of Iowa

Volume 54 | Number 3 (Summer 1995) pps. 279-280

Science With Practice: Charles E. Bessey and the Maturing of American Botany

ISSN 0003-4827
Copyright © 1995 State Historical Society of Iowa. This article is posted here for personal use, not for redistribution.

Recommended Citation
"Science With Practice: Charles E. Bessey and the Maturing of American Botany." *The Annals of Iowa* 54 (1995), 279-280.
Available at: https://doi.org/10.17077/0003-4827.9943
Hosted by Iowa Research Online

tribal identity were reinforced as diverse tribal groups were forced into close contact. A camaraderie developed, uniting students in "a complex web of support and mutual respect" (44).

The alumni narratives that are the heart of this book vividly conjure up an image of a time and place when federal policies attempted to transform Indian children into the mainstream American ideal: farmers and Christians. But outwitting the system became almost an art, and the alumni responses show that, at the least, the ideal was resisted much of the time. Alumni reminiscences include tales of theft (mainly of food), alcohol abuse (making of home brew), running away, and efforts to retain ties to home cultures, evident in such activities as stomp dancing, parching corn, and chewing peyote (140). Nevertheless, there are some kind words about the social training and educational opportunity made available to them. As one put it, "I learned more there, maybe not academically, but overall, to take care of myself" (163).

Lomawaima concludes her analysis of Chilocco with the observation that "no institution is total, no power is all-seeing" (164). Her interviews bear this out, revealing diverse experiences of the Indian students and their sometimes successful attempts to maintain some control over their lives. She pictures the students as active participants, creating a world for themselves within the confines of an alien system and structure (167).

They Called It Prairie Light will interest readers in the Midwest, where many Indian boarding schools operated between 1890 and 1940. Unfortunately, few studies about them have been published, a real gap in local and state history. Lomawaima's work should help stimulate research into these institutions.

Science with Practice: Charles E. Bessey and the Maturing of American Botany, by Richard A. Overfield. Ames: Iowa State University Press, 1993. xiii, 262 pp. Illustrations, notes, bibliography, index. $37.95 cloth.

REVIEWED BY DANIEL GOLDSTEIN, IOWA CITY, IOWA

Charles Edwin Bessey (1845–1915) was one of those people who seems to have possessed more than the usual amount of energy and, what is more, knew how to use it constructively. Bessey helped revolutionize science education in this country both by being one of the first scientists to make work with a microscope a regular part of classroom instruction and by writing a botanical text for high school students structured according to the principles of "the new botany" of the late nineteenth century. He also helped to shape two land-grant colleges:

the Iowa Agricultural College (now Iowa State University) and the University of Nebraska–Lincoln. Between 1870 and 1884, he was one of the most influential members of a very small faculty at Iowa Agricultural College, and even served briefly as its acting president. In 1884 he moved to Nebraska, where over the course of the next thirty years he served as professor, as dean of both the Industrial College and the College of Literature, Science and Arts, and as acting chancellor of the university. In addition to his academic activities, Bessey also conducted research in botany and agricultural science, belonged to a variety of local, state, and national scientific organizations, and contributed to the major theoretical debates in his field—most notably a controversial effort to update the rules and procedures botanists followed when naming and classifying specimens.

Richard A. Overfield has written a well-researched and tightly focused study of Bessey's rich professional life. This biography is a welcome addition to the growing literature on the history of science. Particularly important is its examination of the area where science and agriculture meet. The book is divided into eight thematic chapters on subjects including university politics and the changing structure and content of American science. Topics as varied as state politics and the transformation of botany into a profession are treated as they related to Bessey's life and his interests—specifically to his overriding concern to link basic research with useful applications.

Overfield's consistent focus on what Bessey summed up as "science with practice" permits him to address a bewildering range of topics in a manageable fashion. The approach works particularly well for his analysis of Bessey's efforts to disseminate university research among the farming community. Readers may well find this portion of the book the most interesting in light of the growing national debate over the role of public universities. On the other hand, this tight focus means that Overfield can only touch on other issues, including the role of women scientists in the university, that cannot be effectively examined in terms of "science with practice." It also means that readers learn surprisingly little about Bessey's personality and family life.

Bessey has had a lasting influence on American botany and agriculture directly through his own research and indirectly through the activities of his many students. Overfield's work should stimulate other historians to examine others who, in myriad ways, dedicated their lives to the ideal of science with practice.

Copyright of Annals of Iowa is the property of State of Iowa, by & through the State Historical Society of Iowa and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.